

## CLAIMS

We claim:

1           1. (original) A device for collecting semen received from a glans penis of a  
2 male human individual, said device comprising:  
3           a chamber, said chamber comprising a distal end, a proximal end, and a  
4 conduit extending between said distal end and proximal end;  
5           said proximal end having a rim defining an aperture;  
6           said distal end having a surface that encloses said conduit;  
7           at least a portion of said conduit proximal to said proximal end having a  
8 tapered shape radially inward defining a tapered section, whereby said tapered section  
9 accommodates the head of the glans penis; and  
10          at least a portion of said conduit proximal to said distal end adapted for  
11 receiving the semen ejaculated from the glans penis, said receiving portion defining a  
12 reservoir section for the semen.

1           2. (original) The device of claim 1, wherein said tapered accommodation  
2 section is configured to the general external image of the head of the glans penis.

1           3. (original) The device of claim 1, wherein said tapered accommodation  
2 section is configured to prevent loss of any fractions of semen during ejaculation.

1           4. (original) The device of claim 1, wherein said reservoir section is  
2 configured to prevent loss of any fractions of semen during ejaculation.

1           5. (original) The device of claim 1, wherein said tapered accommodation  
2 section and said reservoir section are configured to prevent loss of any fractions of  
3 semen during ejaculation.

1           6. (original) The device of claim 1, wherein said enclosure surface is adapted  
2 to allow said chamber to stand upward on a surface.

1           7. (original) The device of claim 1, wherein said enclosure surface is at least  
2 substantially flat.

1           8. (original) The device of claim 1, wherein the longest cross-section of said  
2 reservoir section is equal to or less than the shortest cross-section of the tapered  
3 accommodation section.

1           9. (original) The device of claim 8, wherein said enclosure surface is adapted  
2 to allow said chamber to stand upward on a surface.

1           10. (original) The device of claim 9, wherein said enclosure surface is at least  
2 substantially flat.

1           11. (original) The device of claim 1, wherein the longest cross-section of said  
2 reservoir section is greater than the shortest cross-section of the tapered  
3 accommodation section.

1           12. (original) The device of claim 11, wherein said enclosure surface is  
2 adapted to allow said chamber to stand upward on a surface.

1           13. (original) The device of claim 12, wherein said enclosure surface is at  
2 least substantially flat.

1           14. (original) The device of claim 1, further comprising:  
2 at least one protruding member disposed on said chamber, said protruding  
3 member adapted to allow said chamber to stand upward on a surface.

1           15. (original) The device of claim 14, wherein said protruding member  
2 comprises at least one leg.

1           16. (original) The device of claim 14, wherein said protruding member  
2 comprises a collar surrounding at least a portion of said chamber.

1           17. (original) The device of claim 14, wherein the longest cross-section of  
2 said reservoir section is equal to or less than the shortest cross-section of the tapered  
3 accommodation section.

1           18. (original) The device of claim 14, wherein the longest cross-section of  
2 said reservoir section is greater than the shortest cross-section of the tapered  
3 accommodation section.

1           19. (original) The device of claim 1, wherein said tapered accommodation  
2 section is bell-shaped.

1           20. (original) The device of claim 1, wherein said tapered accommodation  
2 section is olive-shaped.

1           21. (original) The device of claim 1, wherein said tapered accommodation  
2 section is hemispherical-shaped.

1           22. (original) The device of claim 1, wherein said tapered accommodation  
2 section is ellipsoid-shaped.

1           23. (original) The device of claim 1, wherein said tapered accommodation  
2 section is multifaceted-shaped.

1           24. (original) The device of claim 1, wherein said tapered accommodation  
2 section is cone-shaped.

1           25. (original) The device of claim 1, wherein said tapered accommodation  
2 section comprises at least one wall, wherein said at least one wall comprises a shape  
3 selected from the group consisting of curved, multicurved, sloped, multifaceted,  
4 beveled, sloped, and chamfered.

1           26. (original) The device of claim 1, further comprising a cover disposed on

2 said chamber.

1 27. (original) The device of claim 1, further comprising a cover disposed on  
2 said device.

1 28. (original) The device of claim 1, further comprising a tracking medium  
2 disposed on said chamber.

1 29. (original) The device of claim 28, wherein said a tracking medium  
2 comprises at least one of frosted surface or bar code label.

1 30. (original) The device of claim 1, further comprising a volume  
2 identification medium disposed on said chamber.

1 31. (original) The device of claim 30, wherein said a volume identification  
2 medium comprises at least one graduated mark or a calibrated region adapted for  
3 indicating volume.

1 32. (original) The device of claim 1, wherein said device is used for an  
2 application selected from the group consisting of hospitals, clinics, semen analysis  
3 laboratories, fertility and infertility diagnostic laboratories, IVF clinics, ICSI clinics,  
4 artificial insemination clinics, vasectomy clinics, andrology research laboratories,  
5 basic research laboratories, forensic (crime) laboratories and law enforcement  
6 agencies, prisons, home sperm test users, and environmental monitoring for effect of  
7 toxins on spermatogenesis in occupations such as mining, agriculture, radiation  
8 exposure, and industries.

1 33. (original) The device of claim 1, further comprising a port disposed on  
2 said reservoir section to allow for drainage or removal of the semen.

1 34. (original) The device of claim 1, further comprising a port disposed on  
2 said reservoir section to allow for access or communication to the semen.

1           35. (original) The device of claim 1, wherein said chamber is integrally  
2      formed.

1           36. (original) The device of claim 1, wherein said device is integrally formed.

1           37. (original) The device of claim 1, wherein said chamber is partially  
2      integrally formed.

1           38. (original) The device of claim 1, wherein said device is partially  
2      integrally formed.

1           39. (original) The device of any one of claims 37 and 38, wherein said  
2      tapered accommodation section and said reservoir section are attachable to one  
3      another and/or detachable from one another.

1           40. (original) The device of claim 1, further comprising an adapter section.

1           41. (original) The device of claim 40, further comprising at least one handle  
2      disposed on said device.

1           42. (original) The device of claim 41, wherein said handle comprise at least  
2      one of tab, ridge, strap, knob, protrusion, or lever.

1           43. (original) The device of claim 40, further comprising at least one grip  
2      ridge disposed on said device.

1           44. (original) The device of claim 40, wherein said adapter section comprises  
2      a collar.

1           45. (original) The device of claim 44, wherein said adapter section is  
2      configured to accommodate the glans penis.

1           46. (original) The device of claim 44, wherein said collar comprises at least  
2 one of lubricant, jacket or lining.

1           47. (original) The device of claim 40, wherein said adapter section comprises  
2 an ejaculation aid device.

1           48. (original) The device of claim 40, wherein said adapter section comprises  
2 a stimulation device for stimulating the glans.

1           49. (original) The device of claim 40, wherein said adapter section is adapted  
2 for being held by the individual or a partner.

1           50. (original) The device of claim 1, wherein said reservoir section at least  
2 partially comprises at least one communication channel.

1           51. (original) The device of claim 50, wherein said at least one  
2 communication channel comprises at least one of channel, microchannel, capillary  
3 tube, microtubing, tubing, pipette, micropipette, or column.

1           52. (original) The device of claim 1, further comprising a port disposed on  
2 said collection device.

1           53. (original) The device of claim 52, wherein said port is in communication  
2 with at least one communication channel.

1           54. (original) The device of claim 53, wherein said at least one  
2 communication channel comprises at least one of channel, microchannel, capillary  
3 tube, microtubing, tubing, pipette, micropipette or column.

1           55. (original) The device of claim 1, further comprising at least one handle  
2 disposed on said device.

1           56. (original) The device of claim 55, wherein said handle comprise at least  
2 one of tab, ridge, strap, knob, protrusion, or lever.

1           57. (original) The device of claim 1, further comprising at least one grip  
2 ridge disposed on said device.

1           58. (original) A method for collecting semen received from a glans penis of a  
2 male human individual during ejaculation, said method comprising:  
3 placing a semen collecting device in contact with the glans head of the  
4 individual; and  
5 receiving semen produced from the ejaculation in said semen collecting  
6 device.

1           59. (original) The method of claim 58, wherein said collection device  
2 comprises:  
3 a chamber, said chamber comprising a distal end, a proximal end, and a  
4 conduit extending between said distal end and proximal end;  
5 said proximal end having a rim defining an aperture;  
6 said distal end having a surface that encloses said conduit;  
7 at least a portion of said conduit proximal to said proximal end having a  
8 tapered shape radially inward defining a tapered section, whereby said tapered section  
9 accommodates the head of the glans penis; and  
10 at least a portion of said conduit proximal to said distal end adapted for  
11 receiving the semen ejaculated from the glans penis, said receiving portion defining a  
12 reservoir section for the semen.

1           60. (original) The method of claim 59, wherein the said contact of the glans  
2 head with said collection device is at least partially in contact with said tapered  
3 accommodation section.

1           61. (original) The method of claim 59, wherein the said contact of the glans

2 head with said collection device is solely in contact with said tapered accommodation  
3 section.

1 62. (original) The method of claim 59, wherein said tapered accommodation  
2 section is bell-shaped.

1 63. (original) The method of claim 59, wherein said tapered accommodation  
2 section is olive-shaped.

1 64. (original) The method of claim 59, wherein said tapered accommodation  
2 section is hemispherical-shaped.

1 65. (original) The method of claim 59, wherein said tapered accommodation  
2 section is ellipsoid-shaped.

1 66. (original) The method of claim 59, wherein said tapered accommodation  
2 section is multifaceted-shaped.

1 67. (original) The method of claim 59, wherein said tapered accommodation  
2 section is cone-shaped.

1 68. (original) The method of claim 59, wherein the placement prevents loss  
2 of any fractions of semen during ejaculation.

1 69. (original) The method of claim 59, wherein said tapered accommodation  
2 section is configured to the general external image of the head of the glans penis.

1 70. (original) The method of claim 59, wherein the placement includes  
2 aligning the urethra of the glans penis with said reservoir section.

1 71. (original) The method of claim 59, wherein the placement includes



2 aligning the urethra of the glans penis with said tapered accommodation section.

1 72. (original) The method of claim 59, wherein the placement includes  
2 aligning the urethra of the glans penis with both said reservoir section and said  
3 tapered accommodation section.

1 73. (original) The method of claim 58, wherein the placement prevents loss  
2 of any fractions of semen during ejaculation.

1 74. (original) A test kit for analyzing the semen collected in claim 58,  
2 comprising:  
3 a surface on which the semen sample collected in said device can be  
4 deposited; and  
5 a means for analyzing the semen sample deposited on said surface.

1 75. (original) The test kit of claim 74, wherein said means for analyzing the  
2 semen sample determines at least one of: presence of sperm; concentration of sperm;  
3 condition of sperm, quality of sperm, sperm count, sperm morphology, sperm  
4 motility, or sperm viability and markers of accessory sex gland secretion.

1 76. (original) A test kit for analyzing the semen collected in claim 58,  
2 comprising:  
3 a surface on which the semen sample collected in said device can be  
4 deposited;  
5 an antibody specific for a testes and sperm tissue-specific protein antigen  
6 present throughout spermiogenesis; and  
7 a means for indicating binding of said monoclonal antibody to antigen present  
8 the semen sample deposited on said surface.

1 77. (original) A test kit for analyzing the semen collected in claim 58,  
2 comprising:  
3 a communication channel on which the semen sample collected in said device

4 can be received; and  
5 a means for analyzing the semen sample received from said communication  
6 channel.

1 78. (original) A test kit for analyzing the semen collected in claim 1,  
2 comprising:

3 a surface on which the semen sample collected in said device can be  
4 deposited; and  
5 a means for analyzing the semen sample deposited on said surface.

1 79. (original) The test kit of claim 78, wherein said means for analyzing the  
2 semen sample determines at least one of: presence of sperm; concentration of sperm;  
3 condition of sperm or quality of sperm.

1 80. (original) A test kit for analyzing the semen collected in claim 1,  
2 comprising:

3 a surface on which the semen sample collected in said device can be  
4 deposited;  
5 an antibody specific for a testes and sperm tissue-specific protein antigen  
6 present throughout spermiogenesis; and  
7 a means for indicating binding of said monoclonal antibody to antigen present  
8 the semen sample deposited on said surface.

1 81. (original) A test kit for analyzing the semen collected in claim 1, wherein  
2 said reservoir section at least partially comprises at least one communication channel,  
3 wherein semen sample collected in said device can be received; and

4 a means for analyzing the semen sample received from said communication  
5 channel.

1 82. (original) The device of claim 1, further comprising a port disposed on  
2 said collection device.

1           83. (original) A test kit for analyzing the semen collected in claim 82, further  
2 comprising:  
3           at least one communication channel in communication with said port, wherein  
4 semen sample collected in said device can be received via said port; and  
5           a means for analyzing the semen sample received from said communication  
6 channel.

1           84. (original) A method for analyzing the semen collected in claim 58,  
2 comprising:  
3           providing a surface;  
4           depositing the semen sample collected in said device on said surface; and  
5           analyzing the semen sample deposited on said surface.

1           85. (original) The method of claim 84, wherein said analyzing of the semen  
2 sample comprises at least one of determining the presence of sperm; determining the  
3 concentration of sperm; determining the condition of sperm or determining the quality  
4 of sperm.

1           86. (original) The method for analyzing the semen collected in claim 58,  
2 comprising:  
3           providing a surface;  
4           depositing the semen sample collected in said device on said surface;  
5           providing an antibody specific for a testes and sperm tissue-specific protein  
6 antigen present throughout spermiogenesis; and  
7           indicating binding of said monoclonal antibody to antigen present the semen  
8 sample deposited on said surface.

1           87. (original) A method for analyzing the semen collected in claim 1,  
2 comprising:  
3           providing a surface;  
4           depositing the semen sample collected in said device on said surface; and

5 analyzing the semen sample deposited on said surface.

1 88. (original) The method of claim 87, wherein said analyzing of the semen  
2 sample comprises at least one of determining the presence of sperm; determining the  
3 concentration of sperm; determining the condition of sperm or determining the quality  
4 of sperm.

1 89. (original) The method of claim 1, comprising:  
2 providing a surface;  
3 depositing the semen sample collected in said device on said surface;  
4 providing an antibody specific for a testes and sperm tissue-specific protein  
5 antigen present throughout spermiogenesis; and  
6 indicating binding of said monoclonal antibody to antigen present the semen  
7 sample deposited on said surface.

1 90. (new) The device of claim 1, further comprising a base in communication  
2 with said device, said base adapted to allow said chamber to stand upward on a  
3 surface.

1 91. (new) The device of claim 90, wherein said communication comprises a  
2 connector.

1 92. (new) The device of claim 91, wherein said connector comprises at least  
2 one leg or stem.

1 93. (new) The device of claim 91, wherein said connector comprises a  
2 joining or adhesive means.